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## **STATISTICAL RELEASE** P4141

# Electricity generated and available for distribution (Preliminary)

December 2024

The results from the January 2025 publication will be updated to include data from independent power producers (IPPs) engaged in electricity wheeling. Electricity wheeling refers to the process of transporting electricity from a generator to an end-user (customer) using an existing transmission or distribution network.

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#### Electricity generated (produced) in South Africa: results for December 2024

Table A - Key growth rates in the volume of electricity generated

	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Year-on-year % change, unadjusted	8,5	6,3	8,5	2,7	6,6	3,2
Month-on-month % change, seasonally adjusted	1,3	-0,7	1,3	-1,2	0,7	-1,4
3-month % change, seasonally adjusted <sup>1</sup>	2,6	3,2	2,7	1,4	0,7	-0,5

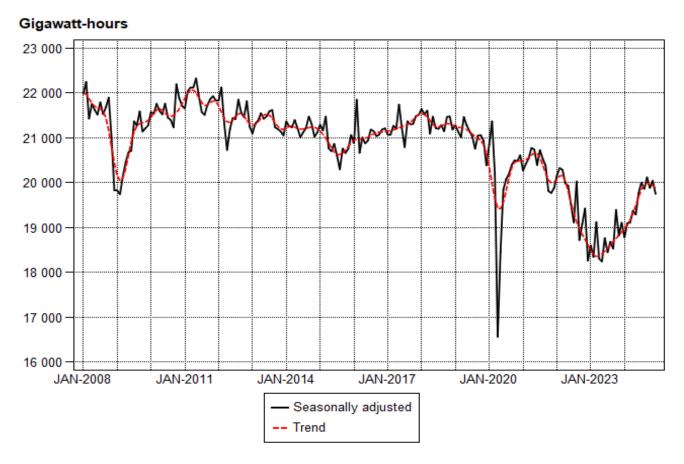
<sup>&</sup>lt;sup>1</sup> Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity generation (production) increased by 3,2% year-on-year in December 2024.

Seasonally adjusted electricity generation decreased by 1,4% in December 2024 compared with November 2024. This followed month-on-month changes of 0,7% in November 2024 and -1,2% in October 2024. Seasonally adjusted electricity generation decreased by 0,5% in the fourth quarter of 2024 compared with the third quarter of 2024.

Total electricity generation was 4,7% higher in 2024 compared with 2023. The 4,7% increase in annual electricity generation followed a decrease of 4,4% in 2023 and a decrease of 3,8% in 2022.

Figure 1 - Electricity generated in South Africa



#### Electricity distributed (consumed) in South Africa: results for December 2024

Table B - Key growth rates in the volume of electricity distributed

	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Year-on-year % change, unadjusted	6,9	4,2	6,1	0,2	2,7	-0,7
Month-on-month % change, seasonally adjusted	1,5	-1,2	0,1	-1,2	0,0	-0,8
3-month % change, seasonally adjusted <sup>1</sup>	1,7	1,9	1,2	-0,2	-0,9	-1,7

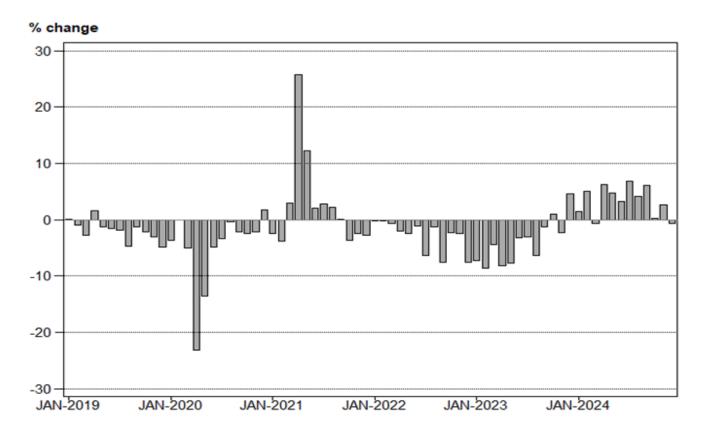
<sup>&</sup>lt;sup>1</sup> Percentage change between the previous 3 months and the 3 months ending in the month indicated.

Electricity distribution (consumption) decreased by 0,7% year-on-year in December 2024.

Seasonally adjusted electricity distribution decreased by 0,8% month-on-month in December 2024, following month-on-month changes of 0,0% in November 2024 and -1,2% in October 2024. Seasonally adjusted electricity distribution decreased by 1,7% in the fourth quarter of 2024 compared with the third quarter of 2024.

Total electricity distribution was 3,3% higher in 2024 compared with 2023. The 3,3% increase in annual electricity distribution followed a decrease of 4,0% in 2023 and a decrease of 2,8% in 2022.

Figure 2 - Electricity distributed in South Africa: year-on-year percentage change





#### **Tables**

Table 1 – Index of the volume of electricity generated (Base: 2019=100)

Month	2018	2019	2020	2021	2022	2023	2024
Jan	101,5	99,5	97,1	93,9	93,0	85,7	86,4
Feb	93,1	91,3	92,2	88,2	87,9	79,4	82,7
Mar	102,5	99,5	95,5	97,2	96,2	90,8	90,8
Apr	96,8	98,5	76,1	95,5	91,9	84,1	88,9
May	105,5	104,9	91,1	102,2	97,9	89,4	94,3
Jun	104,2	104,3	98,3	101,4	97,3	93,7	98,8
Jul	107,9	107,1	102,3	105,7	97,6	94,3	102,3
Aug	104,6	102,1	99,7	101,7	99,5	93,1	99,0
Sep	99,2	98,7	95,7	95,7	87,9	87,0	94,4
Oct	104,5	102,5	99,7	96,2	92,5	94,0	96,5
Nov	100,9	98,2	95,7	92,2	90,5	87,8	93,6
Dec	97,1	93,3	94,3	90,8	83,3	87,0	89,8
Total	101,5	100,0	94,8	96,7	93,0	88,9	93,1

Table 2 - Year-on-year percentage change in the volume of electricity generated

Month	2019	2020	2021	2022	2023	2024	2024 year-to-date
Jan	-2,0	-2,4	-3,3	-1,0	-7,8	0,8	0,8
Feb	-1,9	1,0	-4,3	-0,3	-9,7	4,2	2,4
Mar	-2,9	-4,0	1,8	-1,0	-5,6	0,0	1,6
Apr	1,8	-22,7	25,5	-3,8	-8,5	5,7	2,6
May	-0,6	-13,2	12,2	-4,2	-8,7	5,5	3,2
Jun	0,1	-5,8	3,2	-4,0	-3,7	5,4	3,6
Jul	-0,7	-4,5	3,3	-7,7	-3,4	8,5	4,3
Aug	-2,4	-2,4	2,0	-2,2	-6,4	6,3	4,6
Sep	-0,5	-3,0	0,0	-8,2	-1,0	8,5	5,0
Oct	-1,9	-2,7	-3,5	-3,8	1,6	2,7	4,8
Nov	-2,7	-2,5	-3,7	-1,8	-3,0	6,6	4,9
Dec	-3,9	1,1	-3,7	-8,3	4,4	3,2	4,7
Total	-1,5	-5,2	2,0	-3,8	-4,4	4,7	

Table 3 – Seasonally adjusted index of the volume of electricity generated

Manth		Base: 20	019=100		Month-on-month % change				
Month	2021	2022	2023	2024	2021	2022	2023	2024	
Jan	96,3	95,8	88,4	89,2	-1,6	1,5	1,8	-1,8	
Feb	97,0	96,6	87,2	90,7	0,7	0,8	-1,4	1,7	
Mar	97,6	96,4	90,9	90,8	0,6	-0,2	4,2	0,1	
Apr	98,7	95,0	87,0	92,1	1,1	-1,5	-4,3	1,4	
May	98,6	94,7	86,7	91,7	-0,1	-0,3	-0,3	-0,4	
Jun	96,9	92,7	89,2	93,9	-1,7	-2,1	2,9	2,4	
Jul	98,5	90,8	87,7	95,1	1,7	-2,0	-1,7	1,3	
Aug	97,6	95,2	88,8	94,4	-0,9	4,8	1,3	-0,7	
Sep	96,9	88,9	88,0	95,6	-0,7	-6,6	-0,9	1,3	
Oct	94,2	90,7	92,2	94,5	-2,8	2,0	4,8	-1,2	
Nov	93,9	92,3	89,4	95,2	-0,3	1,8	-3,0	0,7	
Dec	94,4	86,8	90,8	93,9	0,5	-6,0	1,6	-1,4	

Table 4 – Volume of electricity distributed in South Africa (gigawatt-hours)

Month	2019	2020	2021	2022	2023	2024
Jan	19 132	18 444	18 002	17 974	16 664	16 920
Feb	17 493	17 491	16 825	16 815	15 362	16 129
Mar	18 930	17 976	18 522	18 408	17 592	17 465
Apr	18 711	14 379	18 078	17 709	16 271	17 275
May	19 943	17 254	19 371	18 897	17 433	18 257
Jun	19 609	18 664	19 049	18 838	18 232	18 839
Jul	20 224	19 533	20 082	18 814	18 239	19 495
Aug	19 105	19 038	19 459	19 220	17 981	18 740
Sep	18 605	18 216	18 230	16 857	16 648	17 660
Oct	19 367	18 883	18 203	17 784	17 970	18 011
Nov	18 539	18 153	17 713	17 281	16 886	17 349
Dec	17 678	17 979	17 496	16 173	16 923	16 812
Total	227 336	216 010	221 030	214 770	206 201	212 952

Table 5 – Year-on-year percentage change in electricity distributed in South Africa

Month	2020	2021	2022	2023	2024	2024 year-to-date
Jan	-3,6	-2,4	-0,2	-7,3	1,5	1,5
Feb	0,0	-3,8	-0,1	-8,6	5,0	3,2
Mar	-5,0	3,0	-0,6	-4,4	-0,7	1,8
Apr	-23,2	25,7	-2,0	-8,1	6,2	2,9
May	-13,5	12,3	-2,4	-7,7	4,7	3,3
Jun	-4,8	2,1	-1,1	-3,2	3,3	3,3
Jul	-3,4	2,8	-6,3	-3,1	6,9	3,8
Aug	-0,4	2,2	-1,2	-6,4	4,2	3,9
Sep	-2,1	0,1	-7,5	-1,2	6,1	4,1
Oct	-2,5	-3,6	-2,3	1,0	0,2	3,7
Nov	-2,1	-2,4	-2,4	-2,3	2,7	3,6
Dec	1,7	-2,7	-7,6	4,6	-0,7	3,3
Total	-5,0	2,3	-2,8	-4,0	3,3	

Table 6 – Seasonally adjusted volume of electricity distributed in South Africa

Mande		Gigawa	tt-hours					
Month	2021	2022	2023	2024	2021	2022	2023	2024
Jan	18 442	18 490	17 174	17 450	-1,4	1,6	2,0	-1,2
Feb	18 418	18 391	16 730	17 551	-0,1	-0,5	-2,6	0,6
Mar	18 569	18 435	17 591	17 449	0,8	0,2	5,1	-0,6
Apr	18 625	18 223	16 740	17 784	0,3	-1,1	-4,8	1,9
May	18 618	18 230	16 865	17 686	0,0	0,0	0,7	-0,6
Jun	18 142	17 919	17 319	17 861	-2,6	-1,7	2,7	1,0
Jul	18 708	17 531	16 999	18 133	3,1	-2,2	-1,8	1,5
Aug	18 730	18 445	17 230	17 916	0,1	5,2	1,4	-1,2
Sep	18 500	17 105	16 901	17 940	-1,2	-7,3	-1,9	0,1
Oct	17 912	17 534	17 712	17 732	-3,2	2,5	4,8	-1,2
Nov	18 098	17 684	17 269	17 739	1,0	0,9	-2,5	0,0
Dec	18 203	16 845	17 666	17 601	0,6	-4,7	2,3	-0,8

Table 7 – Volume of electricity by category (gigawatt-hours)

	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Dec-24 year-on- year % change
Total - all producers						
Generated	20 838	19 878	20 302	19 694	18 908	3,3
Inflow into South Africa	823	628	660	602	776	-19,6
Consumed in power stations and auxiliary systems	1 719	1 539	1 562	1 444	1 397	0,5
Outflow from South Africa	1 204	1 307	1 388	1 502	1 475	53,8
Distributed in South Africa	18 740	17 660	18 011	17 349	16 812	-0,7
National electricity supplier						
Generated	18 108	17 278	17 755	17 278	16 388	3,8
Inflow into South Africa	823	628	660	602	776	-19,6
Consumed in power stations and auxiliary systems	1 614	1 455	1 491	1 370	1 320	0,7
Outflow from South Africa	1 204	1 307	1 388	1 502	1 475	53,8
Distributed in South Africa	16 114	15 144	15 536	15 007	14 368	-0,8

Table 8 – Year-to-date volume of electricity by category: year-on-year percentage change and difference

	Jan – Dec 2023 (GWh)	Jan – Dec 2024 (GWh)	% change between Jan – Dec 2023 and Jan – Dec 2024	Difference between Jan – Dec 2023 and Jan – Dec 2024 (GWh)
Total - all producers				
Generated	224 400	235 218	4,8	10 818
Inflow into South Africa	10 709	9 755	-8,9	-954
Consumed in power stations and auxiliary systems	17 649	18 494	4,8	845
Outflow from South Africa	11 256	13 528	20,2	2 272
Distributed in South Africa	206 201	212 952	3,3	6 751
National electricity supplier				
Generated	194 657	204 807	5,2	10 150
Inflow into South Africa	10 709	9 755	-8,9	-954
Consumed in power stations and auxiliary systems	16 481	17 403	5,6	922
Outflow from South Africa	11 256	13 528	20,2	2 272
Distributed in South Africa	177 628	183 629	3,4	6 001

#### Table 9 – Volume of electricity delivered to provinces (gigawatt-hours)

Province	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Dec-24 year-on-year % change
Western Cape	1 748	1 590	1 599	1 560	1 542	0,1
Eastern Cape	798	756	746	693	653	-1,1
Northern Cape	500	494	503	488	522	-12,7
Free State	948	848	927	903	938	12,5
KwaZulu-Natal	3 268	3 232	3 293	3 172	3 147	0,2
North West	1 842	1 736	1 724	1 687	1 601	-4,8
Gauteng	4 873	4 468	4 436	4 195	3 832	-1,7
Mpumalanga	2 593	2 477	2 609	2 518	2 515	-2,1
Limpopo	1 755	1 724	1 766	1 750	1 766	0,0
Total	18 324	17 324	17 602	16 964	16 516	-1,0

#### **Explanatory notes**

#### Introduction

- 1 Statistics South Africa (Stats SA) conducts a monthly survey covering enterprises in the electricity industry. This statistical release contains monthly information regarding the volume of electricity units:
  - generated and distributed in South Africa;
  - flowing into and out from South Africa as measured by the metering systems at the South African borders; and
  - delivered to provinces.

Both unadjusted and seasonally adjusted figures are published.

In accordance with international practice, the indices are usually re-based every five years to a new base year. The current base period of the index is 2019.

#### Purpose of the survey

The results of the monthly electricity survey are used to compile estimates of the gross domestic product (GDP) and its components, which are used in monitoring the state of the economy and formulation of economic policy.

#### Scope of the survey

This survey covers enterprises conducting activities concerned with the generation and/or distribution of electricity (excluding the distribution of purchased electric energy). It includes electrical power installations, which, as subsidiary divisions of enterprises, produce electricity for regular use by these enterprises.

#### Classification

The 1993 edition of the Standard Industrial Classification of All Economic Activities (SIC), Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 International Standard Industrial Classification of All Economic Activities (ISIC) with suitable adaptations for local conditions. Each enterprise is classified to an industry which reflects the predominant activity. Statistics in this publication are presented at SIC group (five-digit) level.

#### **Collection rate**

The preliminary collection rate for the survey on electricity generated and available for distribution for December 2024 was 84%. The collection rate for November 2024 was 96%.

#### Statistical unit

7 The statistical unit for the collection of information is an enterprise, defined as a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

#### **Revised figures**

Revised figures are mainly due to late submission of data to Stats SA, or respondents reporting revisions or corrections to their figures. The reasons for routine revisions are outlined in the following schedule. Any unscheduled revisions will be promptly indicated in relevant tables to maintain transparency and accuracy. It is important to note that seasonally adjusted figures are revised monthly.

Statistical release	Reason for revision	Period subject to revision
Dec-24	Additional information from respondents	Nov-24
Jan-25	Additional information from respondents Inclusion of data on electricity wheeling	Aug-85-Dec-24
Feb-25	Additional information from respondents	Jan-25
Mar-25	Additional information from respondents	Feb-25
Apr-25	Additional information from respondents	Mar-25
May-25	Additional information from respondents	Apr-25
Jun-25	Additional information from respondents	May-25
Jul-25	Additional information from respondents	Jun-25
Aug-25	Additional information from respondents	Jul-25
Sep-25	Additional information from respondents	Aug-25
Oct-25	Additional information from respondents	Sep-25
Nov-25	Additional information from respondents	Oct-25
New base year in 2027/28 - periodic, approximately four- to five-year intervals		

#### **Rounding-off of figures**

Where figures have been rounded off, discrepancies may occur between sums of the component items and the totals.

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#### Historical data

Historical electricity data are available on the Stats SA webpage. Click on the following link (Time series data) to access the data electronically.

#### Past publications

Past electricity releases are available on the Stats SA webpage. Click on the following link (Past publications) to access the releases electronically.

#### **Technical notes**

## Survey methodology and design

- All statistical units are stratified by type of economic activity according to the Standard Industrial Classification of All Economic Activities (SIC) and measure of size, where measure of size is the volume of electricity generated by the enterprise. All large enterprises (size group one) are completely enumerated. A sample is drawn from medium and small size enterprises by systematically selecting enterprises within each size category. An enterprise with a total generating capacity of less than 500 kilowatts is excluded from the sample.
- The survey is conducted by email and telephone. Information is collected from a sample of 24 enterprises. As from September 2013, the national electricity supplier provided additional data for independent power producers (IPPs) that were not in the original sample of 24 enterprises.

## Monthly index of electricity generated

3 The calculation of the monthly index of electricity generated is based on the volume of electricity units produced.

#### **Benchmarking**

The index of the volume of electricity generated should provide an accurate reflection of the trend of activities of the relevant industry. The level of activities, as measured by the monthly electricity survey, is based on information received from a sample of enterprises conducting activities concerned with the generation and/or distribution of electricity (excluding the distribution of purchased electric energy). These levels are weighted according to the original sample and designed to represent the population of enterprises conducting activities concerned with the generation and/or distribution of electricity.

The results of the 1995 Census of electricity, gas and steam served as a benchmark to verify or adjust the level of the monthly index of the volume of electricity generated collected through the monthly survey. The level adjustments were done on the volume index for July of the relevant census year (the 1995 census year covered the period 1 January to 31 December 1995 and therefore, the benchmarking was done using the index of July 1995 as reference point).

#### Seasonal adjustment

Seasonally adjusted estimates are generated each month using the X-12 Seasonal Adjustment Program developed by the United States Census Bureau. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove irregular or non-seasonal influences, which may be present in any particular month. Influences that are volatile or unsystematic can still make it difficult to interpret the movement of the series even after adjustment for seasonal variations. This means the month-to-month movements of seasonally adjusted estimates may not be reliable indicators of trend behaviour. The X12-ARIMA procedure for electricity generated and available for distribution is described in more detail on the Stats SA website:

Click to download Electricity seasonal adjustment February 2022.

#### Trend cycle

The trend is the long-term pattern or movement of a time series. The X-12-ARIMA Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates to estimate the underlying trend cycle.

## Month-on-month percentage change

7 The month-on-month percentage change in a variable for any given month is the change between that month and the previous month, expressed as a percentage of the latter.

#### Year-on-year percentage

change

The year-on-year percentage change in a variable for any given period is the change between that period and the corresponding period of the previous year, expressed as a percentage of the latter.

#### **Glossary**

#### **Electricity wheeling**

Electricity wheeling refers to the process of transporting electricity from a generator to an end-user (customer) using an existing transmission or distribution network.

#### **Enterprise**

The enterprise is a legal entity or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.

#### Independent power

producer

An independent power producer (IPP) is a private enterprise that generates electricity and sells it to the national electricity supplier or an end-user (customer).

#### Index of the volume of electricity generated

A statistical measure of the change in the volume of electricity generated in a given period and the volume of electricity generated in the base period. The base period is 2019. The production in the base period is set at 100.

#### Industry

An industry is made up of enterprises engaged in the same or similar kinds of economic activity. Industries are defined in the System of National Accounts (SNA) in the same way as in the Standard Industrial Classification of All Economic Activities (SIC), Fifth Edition, Report No. 09-90-02 of January 1993.

#### Inflow into SA

Electricity flowing into South Africa as measured by the metering systems at the South African borders.

#### **Outflow from SA**

Electricity flowing from South Africa as measured by the metering systems at the South African borders.

#### Unit of electricity

One gigawatt-hour of electricity is equal to one million kilowatt-hours. A kilowatthour is the basic unit of electrical energy equal to one kilowatt of power supplied to or taken from an electric circuit steadily for one hour. One kilowatt-hour equals one thousand watt-hours.

#### Symbols and abbreviations

**GDP** Gross domestic product

GWh Gigawatt-hour

IPPs **Independent Power Producers** 

ISIC International Standard Industrial Classification

SIC Standard Industrial Classification of All Economic Activities

SA South Africa

Stats SA Statistics South Africa Revised figures

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#### **General information**

Stats SA publishes approximately 300 different statistical releases each year. It is not economically viable to produce them in more than one of South Africa's 12 official languages. Since the releases are used extensively locally and by international economic and social-scientific communities, Stats SA releases are published in English.

Stats SA has copyright on this publication. Users may apply the information as they wish, provided that they acknowledge Stats SA as the source of the basic data wherever they process, apply, utilise, publish or distribute the data; and also that they specify that the relevant application and analysis (where applicable) result from their own processing of the data.

#### Advance release calendar

An advance release calendar is disseminated on www.statssa.gov.za.

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Central Reference Library, Mbombela
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Stats SA also provides a subscription service.

#### **Electronic services**

A large range of data is available via online services. For more details about our electronic data services, contact Stats SA's user information service at (012) 310 8600.

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